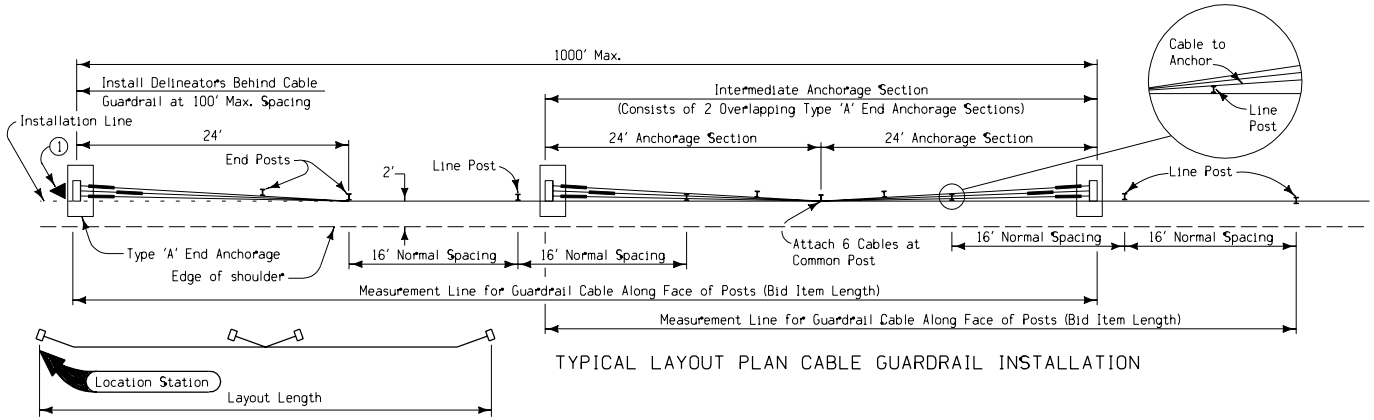
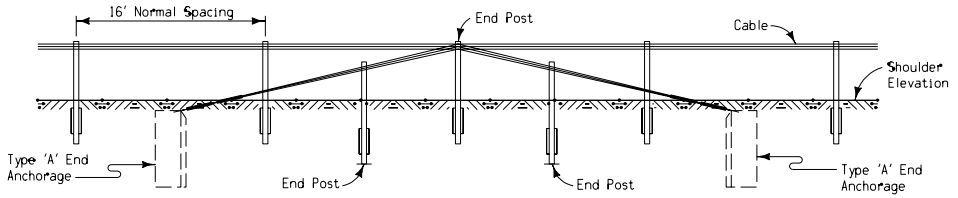
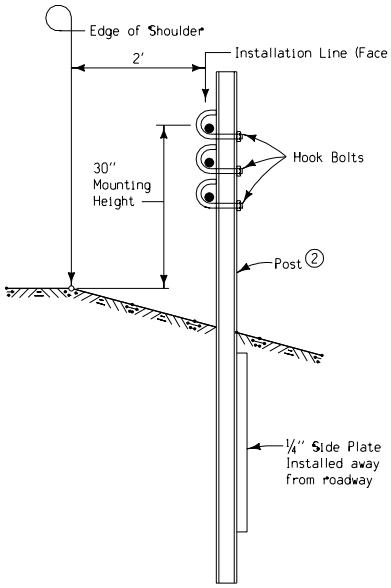


TYPICAL LAYOUT PLAN CABLE GUARDRAIL INSTALLATION

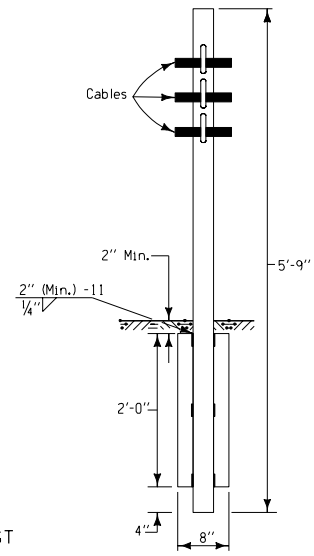
① Install Single White Delineators (D-1W) behind Cable Guardrail at 100' (max.) spacing throughout length of guardrail. Where guardrail installation is not in multiples of 100', adjust spacing to maintain maximum 100' spacing. Place first delineator on installation line adjacent to concrete anchor for Type 'A' End Anchorage only. Refer to Standard Road Plan RE-7 for details of delineators.

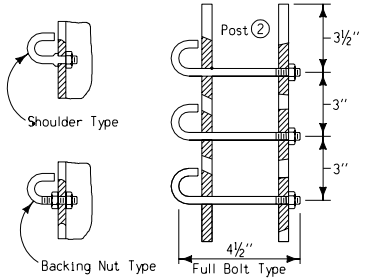


TYPICAL LAYOUT ELEVATION CABLE GUARDRAIL INSTALLATION



DETAILS OF LINE POST

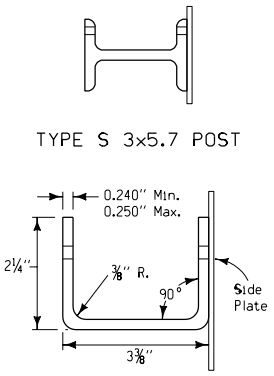




ALTERNATE HOOK BOLTS

DETAILS OF HOOK BOLT INSTALLATION

Note:
Hook bolts, as installed, shall develop an ultimate pull open strength of from 500 to 1000 lbs. applied in a direction normal to the longitudinal axis of the posts. Only use ONE type of bolt per project.



TYPE S 3x5.7 POST

TYPE C 3x5.9 POST ②

② Either Type S 3x5.7 or Type C 3x5.9 meeting min. cross section dimensions as shown may be used.

GENERAL NOTES:

Details shown hereon are for the typical installation of Cable Guardrail. The construction of Cable Guardrail shall be done in conformance with current Standard and Supplemental Specifications. Alternate designs may be submitted to the Engineer for consideration and approval. Refer to project plan details and tabulation of installations for requirements of individual installations and for location of end anchorages.

Unless specified otherwise as part of detail project plans, normal procedure shall be to install cable guardrail parallel to and offset 2 feet from the line of design shoulder. Post spacing shall be 16 feet for alignment flatter than 8 degree curvature. For curvilinear alignment between 8 degree and minimum radius of 220 feet, post spacing shall be 12 feet.

Posts may be driven – except end posts, which shall be set to proper location in pre-drilled holes and securely backfilled and compacted.

For runs over 1000', overlapping end anchorage shall be located to provide approximately equal length sections of guardrail. Maximum length between anchorages shall be 1000'.

Cable End Assemblies, consisting of a spring type compensating device or a turnbuckle, or a combination of the two, shall be installed at end anchorage according to the following criteria:

Length of Run:

Up to 500' – Use a spring type compensating device on one end and a turnbuckle on the opposite end of each individual cable.

From 500' to 1000' – Use a spring type compensating device plus a turn buckle on each end of each individual cable.

On projects where delineators are required along the edge of shoulder throughout the length of the project, placement of delineators as detailed hereon is not required.

Gas Metal-Arc and Flux-Cored Arc Welding may be used for welding incidental items as indicated on this sheet, provided that the fabricator furnishes certifications for the filler metal and gas, uses filler metal on the approved list furnished by the Office of Materials, uses prequalified welding procedures, and uses qualified welders approved by the Iowa D.O.T.

Contract items for Cable Guardrail construction are:

Installation of Guardrail
Cable Guardrail End Anchorage RE-29A

Price bid for contract items shall include all labor and materials necessary to construct cable guardrail as detailed hereon and as specified on project plans, including delineators where required.

Iowa Department of Transportation
Highway Division

STANDARD ROAD PLAN | **RE-29C**

REVISION: Revised name of bid item.	REVISION NO. 11
Mitchell A. Dillavou 12-05-00 APPROVED BY DESIGN METHODS ENGINEER	REVISION DATE 04-03-01

CABLE GUARDRAIL